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UNEMPLOYMENT AMONG YOUNG PEOPLE AND  
GOVERNMENT POLICY IN ONTARIO

Morley Gunderson

Discussion Paper Series

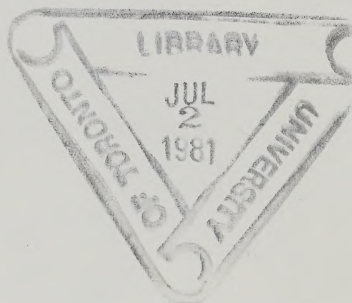
ONTARIO ECONOMIC COUNCIL

© Ontario Economic Council 1981  
81 Wellesley Street East  
Toronto, Ontario  
M4Y 1H6

Printed in Canada

ISSN 0702 0643

ISBN 0 7443 6099 2



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This report reflects the views of the author and not necessarily those of the Ontario Economic Council or the Government of Ontario. The Council establishes policy questions to be investigated and commissions research projects, but it does not influence the conclusions or recommendations of authors. The decision to sponsor publication of this study was based on its competence and relevance to public policy.

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## ACKNOWLEDGMENTS

For helpful discussions and information, I am indebted to Tassos Belessiotis of the Ontario Economic Council; to my colleagues Greg Jump, Noah Meltz, and Frank Reid; to John Kinley, Executive Co-ordinator of the Ontario Manpower Co-ordinating Committee; and two anonymous referees. Jeanne Li and David Smith provided research assistance, and the staff of the Centre for Industrial Relations Library provided background material.



UNEMPLOYMENT AMONG YOUNG PEOPLE AND GOVERNMENT  
POLICY IN ONTARIO



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## INTRODUCTION

The current problem of youth unemployment is well known. What is less well known is the relative importance of the various factors influencing youth unemployment, in particular various government programs that can affect the youth labour market directly and indirectly.

The purpose of this paper is to analyse the problem of youth unemployment in Ontario with particular reference to the ways it is affected by the existing government programs. The analysis is not concerned primarily with the specific features of program structure or administration, however important they may be. Rather the focus is on the broader conceptual and analytical issues of how the programs fit into an overall labour market policy, for which youth unemployment is one problem. The material is discussed in a non-technical fashion, and the emphasis is on highlighting the relevant issues and questions, rather than on providing conclusive answers.

The paper begins with some data on youth unemployment, in particular its magnitude, its relationship to other characteristics of the unemployed, temporal and cyclical variations, comparisons with other countries, and the extent of hidden unemployment. I then discuss some causes of youth unemployment: those that work through the supply side of the youth labour market, those that work through the demand side, and those that affect the matching of supply and demand. Various Ontario government programs are then analysed in the same supply-and-demand categories and are evaluated according to a variety of criteria. The paper concludes with a summary and a discussion of the policy implications and the need for research.

## THE NATURE OF YOUTH UNEMPLOYMENT

How do youth unemployment rates compare to other unemployment rates, and how numerous are unemployed young people in relation to the total number of unemployed? How do youth unemployment rates vary from one province to another and according to marital status and education? How do youth unemployment rates, both absolutely and in relation to other rates, vary with time and in relation to cyclical fluctuations of the economy? How does the picture in Canada compare with other countries,

especially those that have had different youth participation rates in their labour forces? What are the hardships of youth unemployment, as measured by such factors as duration, whether one is seeking full-time or part-time work, and whether one was laid off or voluntarily left one's last job? How much youth unemployment may be hidden?

This paper attempts to shed light on those questions. Wherever feasible, comparisons are made with adults and separate tabulations are given for males and females. Most of the information is available, in the necessary levels of disaggregation, only for all Canada, although some separate estimates are given for Ontario. Throughout the analysis young people (or youths) are defined as ages 15-24; where available, separate data are given for teenagers, 15-19, and young adults, 20-24.

### Incidence and distribution of youth unemployment

Table 1 illustrates the magnitude of the youth unemployment problem in Ontario in 1979. As column (5) shows, the incidence of youth unemployment (i.e. the youth unemployment rate) was markedly higher than that of persons over 25. Although not shown in the table, the youth unemployment rate for both sexes (11.7 per cent) is two and one-half times that for persons over 25 (4.7 per cent). The problem is greatest for teenagers (15-19), especially for male teenagers, whose unemployment rate of 15.1 per cent is four times that of men over 25.

The problem can be portrayed in another way by comparing the distribution of the labour force with the distribution of unemployment. Whereas male teenagers aged 15-19 make up only 6 per cent of the labour force, they make up 14 per cent of the unemployed. Similarly, whereas female teenagers aged 15-19 make up 5 per cent of the labour force, they constitute 12 per cent of the unemployed. The differences in the corresponding proportions are less for young adults aged 20-24; nevertheless, they too constitute a larger portion of the unemployed than of the labour force. Combining the two youth groups for males and females yields the observation that, whereas young people constitute 26 per cent of the labour force, they make up 47 per cent of the unemployed. Clearly young people are overrepresented in the pool of unemployed.

From a policy perspective it is useful to know both the incidence of youth unemployment (11.7 per cent) and the distribution of unemployment

TABLE 1

Distribution and incidence of unemployment by age and sex, Ontario 1979

	Distribution			Incidence (percentages)	
	Population (1)	Labour force (2)	Unemployed (3)	Participation rate (4)	Unemployment rate (5)
Males					
Age 15-19	0.07	0.06	0.14	61.3	15.1
Age 20-24	0.06	0.08	0.11	86.6	9.2
Age 25+	0.36	0.45	0.26	83.0	3.7
Females					
Age 15-19	0.06	0.05	0.12	56.7	14.8
Age 20-24	0.06	0.07	0.10	74.1	9.3
Age 25+	0.39	0.29	0.27	49.4	6.2
Total	1.00	1.00	1.00	66.6	6.5

SOURCE: Computed from data given in Statistics Canada (1979a, 81, 82, 83, 106, 107)

amongst young people (they constitute 47 per cent of the unemployed). The high incidence suggests a high probability of being unemployed if one is young; the high distribution shows that young people are a large group in the labour force, and when this is combined with their high probability of being unemployed, they constitute a large portion of the unemployed. In short, the severe youth unemployment problem is felt by a large group.

#### Youth unemployment by province, marital status, and education

Table 2 shows that youth unemployment rates are high, both absolutely and in relation to the adult rate in all provinces. The Ontario rates for both young people and adults are slightly below the national averages. There is considerable variation in the youth unemployment rates, from a high of 25 per cent in Newfoundland to a low of 6.5 per cent in Alberta. However, there is a remarkable similarity in the ratios of youth to adult unemployment rates in all the provinces: they vary only from 2.7 to 2.9. Clearly provinces with high youth unemployment rates are provinces with high adult rates: presumably the same forces give rise to high adult and youth unemployment rates.

TABLE 2

Unemployment rates by province, marital status, and education, Canada 1979

Group	Age group		Ratio
	15-24	25+	(15-24)/25+
Province			
All Canada	13.0	5.4	2.4
Newfoundland	25.0	11.0	2.3
Prince Edward Island	-	-	-
Nova Scotia	18.3	6.9	2.7
New Brunswick	18.2	8.2	2.2
Quebec	16.4	7.1	2.3
Ontario	11.7	4.7	2.5
Manitoba	9.7	3.7	2.6
Saskatchewan	7.7	2.7	2.9
Alberta	6.5	2.8	2.3
British Columbia	13.2	5.7	2.3
Marital status			
Males: single	14.7	9.0	1.6
married	8.0	3.8	2.1
other	-	7.7	-
Females: single	12.7	4.9	2.6
married	12.7	7.2	1.8
other	-	7.9	-
Education			
0-8 years	23.0	7.4	3.1
High school	13.7	5.6	2.4
Some post-secondary	9.4	5.0	1.9
Post second. certif. or diploma	8.7	4.2	2.1
University degree	7.1	2.8	2.5

SOURCE: Statistics Canada (1979a, Tables 59, 63, and 91)

The youth unemployment rate, both absolutely and in relation to the adult rate, is also high in all the marital status and education categories. The lowest youth rate is for married men - almost half of that for single males. Presumably family responsibilities induce young married men to take jobs, and perhaps marital status is interpreted by employers as a sign of stability. However, the unemployment rates for married women are higher than for single females. For both young people and adults, unemployment rates fall dramatically as the level of education increases.



## Changes over time

Table 3 gives youth unemployment rates for Canada since 1953, compared to the rates for prime-age men. It is clear that youth rates (except for women 20-24) have always been high in relation to the rates of prime-age men. Yet as our overall unemployment rate increased, the rates increased faster for young people than for prime-age men (i.e. the ratio of youth to prime-age male unemployment increased for all youth groups).

It is interesting that the worsening of the relative unemployment position of young people has been greatest for the groups with the lowest youth unemployment rates, that is, for females, especially women 20-24. The unemployment rate for male youths has been increasing but at about the same pace as the rate for prime-age men, so that the relative positions of the two groups have been roughly constant: i.e. the rates for males 15-19 and males 20-24 have been, respectively, three times and twice the rate for prime-age men. The rapid increase in the absolute and relative unemployment rates for female youths can then be viewed as part of the long-run trend in the increase of unemployment for all females compared to males. (Gunderson 1976, 106-7). At present the unemployment rates for male and female youths are fairly similar, as are the rates for males and females in general.

The observation that the ratio of youth to prime-age male unemployment rates has remained roughly constant for males but has increased dramatically for females is important. It suggests that the youth unemployment problem for young males has not worsened in a relative sense, although it has in an absolute sense along with the rise in unemployment of all groups. In addition, the worsening of the female youth unemployment rate in relation to prime-age men is part of the overall increase in unemployment rates for females in relation to males - young females are simply no exception to this trend. As women, including young women, participate more in the labour market they take on more of the labour market characteristics of men, including, unfortunately, their unemployment rates.

These observations suggest that one should regard with caution the view that the increased youth unemployment problem is fundamentally structural, i.e. due to a mismatching of supply and demand. The fact is that the increase in youth unemployment reflects the increased numbers of

TABLE 3  
Youth and 'prime-age' male unemployment rates, Canada 1953-77

Year	Unemployment rates				Ratio youth/prime age male rates			
	Males		Females		Males		Females	
	15-19	10-24	15-19	20-24	15-19	20-24	15-19	20-24
1953	6.9	4.0	3.1	2.1	3.0	1.7	1.3	0.9
54	9.6	6.2	5.7	2.9	2.7	1.8	1.6	0.8
55	9.6	5.7	5.4	2.8	3.0	1.8	1.7	0.9
56	7.7	4.5	4.3	2.0	3.1	1.8	1.7	0.8
57	10.9	6.7	4.8	3.2	2.9	1.8	1.3	0.9
58	15.9	10.4	7.9	4.6	2.8	1.9	1.4	0.8
59	13.7	8.5	7.3	4.0	2.9	1.8	1.6	0.9
1960	15.8	10.1	9.3	4.4	2.8	1.8	1.7	0.8
61	15.8	9.7	9.5	4.5	2.7	1.6	1.6	0.8
62	14.2	8.0	8.2	4.1	3.2	1.8	1.8	0.9
63	13.6	7.8	8.3	4.7	3.3	1.9	2.0	1.1
64	11.9	6.3	8.2	3.7	3.6	1.9	2.5	1.1
65	9.9	4.6	7.4	3.3	3.7	1.7	2.7	1.2
66	9.3	4.3	7.0	2.9	4.0	1.9	3.0	1.3
67	10.6	5.0	7.9	3.6	3.8	1.8	2.8	1.3
68	12.4	6.3	9.0	4.7	3.6	1.9	2.6	1.4
69	12.0	6.2	9.7	4.3	3.9	2.0	3.1	1.4
1970	14.9	8.8	12.6	5.8	3.7	2.2	3.2	1.5
71	16.0	9.4	13.6	6.8	3.8	2.2	3.2	1.6
72	14.9	9.7	12.4	7.4	3.6	2.4	3.0	1.8
73	12.5	8.3	11.7	7.2	3.6	2.4	3.3	2.1
74	12.2	7.9	10.9	7.4	3.7	2.4	3.3	2.2
75	15.4	10.5	14.5	9.1	3.5	2.4	3.3	2.1
76	16.4	11.2	15.1	9.9	3.6	2.4	3.3	2.2
77	18.2	12.8	16.8	11.8	3.5	2.5	3.2	2.3
78	18.5	12.7	17.2	11.5	3.4	2.3	3.1	2.1
79	16.4	11.1	15.8	10.4	3.3	2.3	3.2	2.1

SOURCE: Figures for 1953-77 unemployment rates are from Denton, Spencer, and Robb (1980, Table 7-1). Their original source is the Statistics Canada Labour Force Survey, modified where necessary to correspond to new Labour Force Survey definitions. Figures for 1978 are from Statistics Canada (1979b, 134). Figures for 1979 are from Statistics Canada (1979a, 107).

young people in the labour market and the increase in unemployment among all groups. (The extent to which this overall increase in unemployment is structural is an open question). For young women their increased un-

employment problem is part of the increased unemployment of women in general. In essence, youths, both male and female, are sharing the unemployment problems that characterize the labour market in general. In fact, in view of their large influx into the labour market, it is surprising that larger structural imbalances have not occurred between youth and adult unemployment. (Unfortunately there are no job vacancy data by age that would enable us to test rigorously the hypothesis of a worsening structural imbalance between youth and adult unemployment).

### Regression analysis of trend and cycle

The time trend of youth unemployment rates in relation to the rate for prime-age males is described further in the regression results of Table 4. For all age groups there is a clear upward trend; however, the magnitude is small. For example, for males on average the ratio of youth unemployment to prime-age adult unemployment has increased by about 0.03 each year. The positive time trend is considerably larger for females: 0.09 for teenagers and 0.06 for young adults.

The cyclical pattern is somewhat surprising in that there is a positive relationship between the expansionary phase (as measured by a positive deviation from the trend of real GNP) and the ratio of youth to prime-age male unemployment rates. Conversely in recessions the ratio of youth to prime-age male unemployment falls. Clearly this is not in line with the conventional theory that youth unemployment is disproportionately affected by cyclical downturns in the economy. However, this counter-cyclical movement of the youth/adult unemployment rates may reflect a high proportion of quits among youths and the fact that we would expect quits to go up as the economy expands.<sup>1</sup>

The results are sensitive, however, to the particular functional form used to reflect the standard of comparison for youth unemployment rates. The results in Table 4 are based on the ratio of youth to prime-age male unemployment, the notion being that youths are disproportionately affected by the business cycle if that ratio changes over the cycle. If, for ex-

1 Although not presented in the table, the results are reasonably robust with respect to other measures of cyclical conditions, such as lagged measures or the unemployment rate of prime-age males, and with non-linear time trends as represented by quadratic time.

TABLE 4

Regression of youth/prime age male unemployment rates, on trend and cycle, Canada 1953-79<sup>a</sup>

Sex and age	Constant	Time trend <sup>b</sup>	Cycle <sup>c</sup>	R <sup>2</sup>
Males				
15-19	1.2061	0.0327	0.0564	0.61
20-24	0.0397	0.0298	0.0194	0.79
Females				
15-19	-3.4115	0.0892	0.0586	0.90
20-24	-2.8287	0.0637	0.0321	0.92

a The table contains regression coefficients. All are statistically significant at conventional significance levels.

b Linear time trend coded 53, 54,...79 for the years 1953-79.

c The business cycle is computed as a per cent deviation of real GNP from trend, where the trend is obtained by regressing the logarithm of real GNP against time. This measure of the cycle was used rather than the prime-age male rate to avoid the simultaneous-equation estimation problem associated with having the same variables on both sides of the equation. I am indebted to Greg Jump of the University of Toronto for providing me with the data for the cycle variable.

SOURCE: Youth unemployment rates are from Table 3. Rates for prime age males 25-44 are from Denton, Robb and Spencer (1980, Table 7-1).

ample, a recession doubled the unemployment rate of both youths and prime-age males, it would have no effect on the ratio and we would say that the relative position of youths had not changed. This would be the case even though their absolute unemployment rate had doubled, and even though, because of their higher unemployment rate, this doubling was a much larger absolute increase than for adult males.

For example, assume that the normal unemployment rate for young people is 15 per cent and for adults 5 per cent; the ratio is then 3:1. In a recession the youth rate rises to 18 per cent and the adult rate to 6 per cent. The ratio of 3:1 stays the same because, although the absolute increase of three percentage points for youths is greater than the one percentage point increase for adults, the relative increase is the same; that is, it is a 20 per cent increase for both. Conversely, if the youth



rate increased to 17 per cent and the adult rate to 6 per cent, then the ratio would fall in the recession and we would say that the relative position of youths had improved, even though their absolute position had deteriorated and this deterioration of two percentage points was twice that of the deterioration of the adult rate.

Admittedly there can be an element of arbitrariness in the use of the ratio as the standard of comparison. Yet it is a measure of structural change that controls for the level of unemployment. Other standards, of course, are possible. For example, one could use absolute differences in the unemployment rates, in which case a rise in the youth rate to 17 per cent would be interpreted as a deterioration in the position of youths in relation to adults because the youth rate went up by two percentage points, whereas the adult rate went up by only one percentage point.

Economic theory does not tell us which is correct. There may be theoretical reasons to believe that, because of differences between young people and adults in the costs and benefits of the time spent looking for work, the optimal unemployment rate is greater for youths than adults. But there is no way of quantifying the optional youth rate as, say, twice that of the adult unemployment rate or 10 per cent higher than the adult rate.

It is important to be clear which standard one is using. Using the ratio of youth to adult rates as the standard yields the conclusion that cyclical fluctuations in the economy do not have a disproportionate effect on youth unemployment in relation to adult unemployment, although it is still possible that youth unemployment rates may fluctuate absolutely more than adult rates. In fact, a regression of youth rates on a time trend and on adult rates shows that, as adult rates increase, youth rates increase even more: a one percentage point increase in the prime-age male rate is associated with approximately a two percentage point increase in the rate for males and an increase of slightly over one percentage point for females. However, because of the higher absolute level of unemployment among young people these increases are proportionately smaller for them, and hence the ratio of youth to adult unemployment rates fall in a recession.

This can also be seen by a simple perusal of the raw data presented above in Table 3. In recession years such as 1954, 1958, 1961, and 1970-71, and the more recent slack years from 1975-8, there are generally

higher rates of youth unemployment (as well as higher rates of adult unemployment). However, these are not usually years of higher youth unemployment in relation to adult unemployment, as exhibited by the ratio on the right-hand side of the table; in fact, the opposite appears to be the case.

What happens in a recession is that both adult and youth rates rise and the youth rates increase absolutely more than the adult rates, but, because of their already high rates, this greater absolute increase is a smaller relative increase, so that the ratio of the youth to adult rate falls. In that sense, young people are not disproportionately affected by cyclical fluctuations.

### International comparisons

Table 5 shows that the phenomenon of high and growing youth unemployment rates is not unique to Canada. In fact, most of the OECD countries have had a much larger growth of youth unemployment rates, although Canada now has one of the highest (as well as one of the highest overall unemployment rates).

Table 6 shows that Canada has one of the lower ratios of youth to adult unemployment, in spite of having the highest growth in the youth labour force between 1960 and 1975. In 1976 this ratio was lower only in Austria, Germany, and Japan, all of which are countries whose youth labour forces shrank between 1960 and 1975. It appears that Canada was able to adapt to this rapid increase in its youth labour force without a tremendous increase in its youth unemployment rate in relation to its adult unemployment rate.

Before congratulating ourselves on this apparent adaptability of our labour force, however, we should keep a number of caveats in mind. First, the youth labour force might have grown even more had it not been for the high youth unemployment and the resultant lack of job opportunities. Secondly, these ratios are relative to the adult unemployment rate, which itself grew markedly between 1960 and 1976. Thirdly, in other countries with high growth rates in their youth labour force - notably the U.S. - the youth rate in relation to the adult rate actually declined. The fourth and most important point is that, even if the youth rate did not increase markedly in relation to the adult rate, it did increase

TABLE 5

Youth unemployment rates, OECD countries, 1965, 1970, and 1976 (percentages)

Country	1965	1970	1976
Australia <sup>a</sup>	1.7	2.5	9.0
Austria <sup>b</sup>	-	1.4	1.4
Canada <sup>b</sup>	6.2	10.1	12.7
Finland <sup>c</sup>	2.3	3.0	8.3
France <sup>d</sup>	-	1.5	9.9
Germany <sup>d</sup>	0.2	0.3	5.2
Italy <sup>e</sup>	8.7	10.2	14.4
Japan <sup>f</sup>	-	1.9	3.1
Spain <sup>f</sup>	1.8	2.3	12.5
Sweden <sup>g</sup>	2.6	2.8	3.6
United Kingdom <sup>h,i</sup>	1.2	2.7	13.1
United States <sup>g</sup>	9.1	9.9	14.0

a Ages 14-29 for 1965 and 1970, and 15-29 for 1976

b Figures are on the Labour Force Survey new definitional basis.

c Revised series from 1976

d Figure in 1965 column refers to 1964.

e Ages 14-24

f Figure in 1965 column refers to 1967.

g Ages 16-24

h Unemployed less than 25; labour force ages 16-24

i Rates are for Great Britain.

SOURCE: Denton, Robb, and Spencer (1980, Table 39). Except where noted, youth refers to ages 15 to 24.

and the youth rate is now very high, both absolutely and in relation to the high adult rate.

#### Duration, work sought, and reason for leaving last job

Table 7 shows that younger workers tend to have shorter periods of unemployment than older workers. According to the data source, the average length of unemployment for persons under 25 and persons 25-44 were 12.5 weeks and 16.5 weeks respectively for males, and 12.7 weeks and 15.4 weeks respectively for females.

The positive relationship between age and duration of unemployment also appears when one controls for the effect of other variables. Nickell (1979, 1261-2), for example, uses logit analysis to estimate the deter-

TABLE 6

Ratio of youth/adult unemployment rates, 1960, 1970, and 1976, and growth of the youth labour force, 1960-75, OECD countries

	Ratio			Growth of youth labour force 1960-75, percentages
	1960	1970	1976	
Australia	2.4	3.1	3.3	49
Austria	-	1.6	1.4	-12
Canada	1.7	2.3	2.4	86
Finland	1.9	1.9	2.9	6
France	-	1.3	-	31
Germany	0.4	.8	1.7	-31
Italy	3.8	6.8	9.0	-32
Japan	-	2.0	1.6	-22
Spain	-	3.3	3.8	24
Sweden	2.6	2.2	3.0	14
United Kingdom	1.1	1.2	3.4	-10
United States	2.8	2.9	2.5	82

SOURCE: Denton, Robb, and Spencer (1980, Table 40). Their original data source is Ontario Ministry of Treasury, Economics, and Intergovernmental Affairs (1978), which uses data from OECD sources.

minants of the probability of leaving unemployment in the UK and finds that 'age has a strong influence on expected duration with old workers remaining unemployed for over twice as long as the very young, on average. It should perhaps be noted that we were unable to detect any non-linearities in the age relationship and that the duration increase appears to be more or less uniform throughout the age scale.'

Econometric studies also find that even when other factors are held constant, the longer one is unemployed, the less likely one is to obtain work (McGregor 1978, Nickell 1979, both for the UK). If this is true of young people, it suggests that the shorter duration of their unemployment by itself helps their employment possibilities. In other words because the duration of their unemployment is short, youths do not appear to reduce their job search over their spell of unemployment, nor do employers appear reluctant to hire them because of their unemployment history.

Table 7 shows that among unemployed males (but not females) a larger proportion of young persons than older persons sought part-time work. Nevertheless the vast majority of unemployed young workers were seeking full-time jobs, and for females, the proportion seeking a full-time

TABLE 7

Unemployed by duration, type of work sought, reason for leaving last job, and time since leaving previous job, Canada 1979 (percentages of total)

	Males		Females	
	15-24	25+	15-24	25+
Duration of unemployment				
4 weeks or less	35	28	36	31
5-13 weeks	32	29	31	28
Over 13 weeks	30	41	30	38
Other <sup>a</sup>	3	2	3	3
Total	100	100	100	100
Type of work sought				
Full-time	84	97	79	80
Part-time <sup>b</sup>	16	3	21	20
Total	100	100	100	100
Reason for being unemployed				
Own illness	2	5	4	6
Personal responsibility	-	2	6	12
School	11	2	12	-
Laid off	59	70	39	47
Retired	-	2	-	-
Other, not specified	19	19	23	26
Not worked in 5 yrs	-	-	-	9
Never worked	9	-	16	-
Total	100	100	100	100

a Includes persons with a job to start within four weeks of the reference week who had not actively looked for work in the past four weeks but who were available for work in the reference week.

b The total here refers to unemployed who looked for work. It excludes a small number who did not look for work because they were on layoff or waiting to start a new job. The other totals include these as part of the usual definition of unemployed.

SOURCE: Computed from data in Statistics Canada (1979, Tables 94, 96, 99)

job was the same as for older women.

The reason that the greatest number of both young and older workers gave for leaving their last job was that they had been laid off. Although a substantial proportion of younger workers, especially females, had never worked before or had left their last job to attend school, an even larger proportion had been laid off.

In general, then, the severity of unemployment seems slightly less for young workers than for older workers: their duration of unemployment is

shorter; proportionately more seek only part-time work; and proportionately fewer are out of work as a result of being laid off. Nevertheless, one cannot dismiss the severity of youth unemployment. The facts are that the duration of youth unemployment is only slightly less than that of older workers, most unemployed youths are seeking full-time work, and many were laid off from their previous job.

### Hidden unemployment

The possibility of hidden unemployment amongst young people is particularly strong because of their weaker attachment to the labour force. In particular it is possible that, because of their high levels of unemployment, many young workers are involuntarily working only part-time or are involuntarily not in the labour force.

In fact, however, Table 8 shows that only 19 per cent of young males were employed part-time, and of that number the vast majority were attending school. Only a small fraction were working part-time because they could not find full-time work. For females, the proportion of young persons working part-time is larger than for males; yet it is not much larger than for older women. Similarly, most were working part-time because they were attending school. Only a small proportion were working part-time because they could not find full-time work.

Table 9 contains information on persons who were not in the labour force. It shows that most young persons who were not in the labour force were attending school or had never worked before. The bottom part of the table shows that only a small proportion of younger workers, both absolutely and in relation to older workers, were not in the labour force because they believed no work was available.

The evidence presented here, however, may underestimate the extent of hidden unemployment amongst young people in that some may be attending school because of the lack of jobs. Since schooling is an alternative for young persons, this is a possibility. To the extent that schooling enhances their future prospects of obtaining a job, however, we may not want to think of this completely as hidden unemployment.

### Econometric studies of the causes of unemployment

While it is clear that the unemployment rate of youths is higher than that



TABLE 8

Part-time employment status by reason, age, and sex, Canada 1979 (percentages of total)

Employment status and reason	Males		Females	
	15-24	25+	15-24	25+
Employment status				
Full-time	81	98	73	78
Part-time	19	2	27	22
Total	100	100	100	100
Reason for part-time				
Personal or family responsibilities	-	-	3	22
Going to school	75	9	58	1
Only find part-time work	16	22	22	15
Did not want full-time	7	43	15	58
Other reasons	2	26	2	4
Total	100	100	100	100

SOURCE: Computed from Statistics Canada (1979, Tables 83, 86)

of adults, it is not clear how much of the difference can be attributed to other factors such as education or marital status, nor is it clear how these other factors may affect youth unemployment in general. Econometric studies of the causes of unemployment can shed some light on the issue.

Denton, Robb, and Spencer (1980), for example, find that, although increased education does reduce the probability of being unemployed, the difference is quite small within the younger age groups. In addition, the sex of young persons does not appear to have any significant effect on unemployment once other factors are held constant. Heads of families are less likely to be unemployed.

Using 1971 Canadian census data, Gunderson (1976, 136-7) finds that the unemployment rate declines with age, even when other factors such as education, marital status, occupation, and region are held constant. Confirming the simple tabulations, the effect of marital status is different for men and women. Being married reduces the probability of unemployment dramatically for men but increases it for women.

In all age groups (not just the young age groups examined by Denton, Robb, and Spencer) unemployment declines with education when other factors are controlled for. This was also found by Ashenfelter and Ham (1979), who used U.S. data for older men; in fact they find that most

TABLE 9

Persons not in labour force by reason for leaving last job, time elapsed since leaving previous job, and reason for not looking, by age and sex, Canada, 1979 (percentages of total)

Category	Males		Females	
	15-24	25+	14-24	25+
Reason for leaving last job				
Own illness	1	10	3	4
Personal responsibilities	1	1	11	9
School	37	1	22	1
Laid off	13	8	11	5
Retired	-	21	-	3
Other	6	5	9	6
Not worked in 5 yrs.	-	52	2	50
Never worked	42	2	42	22
Total	100	100	100	100
Reason for not looking				
Personal or illness	-	13	9	28
At school	39	-	34	-
Not interested or found job	7	-	8	11
Awaiting recall or reply <sup>a</sup>	11	27	9	19
Believe no work available <sup>b</sup>	8	29	8	19
Other or not available <sup>c</sup>	35	31	32	23
Total <sup>c</sup>	100	100	100	100

a Includes persons who work on an 'on-call' basis, e.g. substitute teachers, persons who work occasionally for temporary employment agencies, etc.

b Includes persons (mostly full-time students) who had looked for work but were not available for work in the reference week.

c Persons not in the labour force but who looked for work in the past six months. This total is clearly less than the previous two totals, which included persons who had not looked for work in the past six months.

SOURCE: Statistics Canada (1979, Tables 104, 105)

of the positive returns of schooling on earnings comes about because schooling reduces the probability of unemployment more than it increases the wage rate of the employed.

#### CAUSES OF YOUTH UNEMPLOYMENT

Before any attempt to assess the effect on youth unemployment of various



public programs, it is useful to analyse the causes of youth unemployment. For purposes of exposition, the factors influencing youth unemployment will be categorized as supply or demand factors or factors that affect the matching of supply and demand, although the two are related and the distinction is often somewhat arbitrary. An attempt will also be made to discuss expected future changes in these factors so as to forecast changes in youth unemployment.

### Supply-side factors

The unemployment rate for a particular group is the number of unemployed divided by the size of the labour force of that group. The number of unemployed is simply the labour force minus the number employed, and the size of the labour force of a particular group in turn is equal to the product of the labour force participation rate of the particular group and the population size of that group. Thus, increases in the number of young people or in the participation rate of young people in the labour force may enlarge the youth labour force; and, if the increased supply cannot be absorbed into jobs, the youth unemployment rate will rise.

Demographic changes, in particular the baby boom after the Second World War, have had a pronounced influence on the supply side of the labour market. The rapid increase in the size of our youth population (both absolutely and in relation to our total population) during the 1960s and 1970s is a well documented fact (Stone and Marceau 1977, Foot 1979, Ontario Ministry of Treasury and Economics 1980). These studies also show clearly, however, that this relative growth in our youth population is over, so that projections for the 1980s and onwards show youths constituting a much smaller part of our total population.

The labour force participation of younger workers has exhibited complicated patterns over time. As Appendix A illustrates, the labour force participation rate of teenagers 15-19 declined slightly from the 1950s until around 1970, after which it rose quite dramatically. For youths 20-24 a similar pattern is evident for men, while for women there was a fairly rapid increase in labour force participation, which accelerated in the mid-1960s. In general, then, the pattern exhibits the opposing forces of declining labour force participation associated with increased school enrolment, especially for younger ages, and increased participation of young

women, which is associated with the dramatic increased participation of women of all ages in the labour market. During the 1970s the trend in labour force participation rates appears to be upwards for both male and female youths, and projections into the mid-1980s suggest that these upward trends will continue (Foot 1979, 118).

The combination of a rapidly growing population and an increasing labour force participation rate, at least in the 1970s, led to a rapid expansion of the youth labour force in Canada. In fact, as pointed out in Table 5, between 1960 and 1975 Canada had the highest youth labour force growth rate of all OECD countries. Clearly this rapid influx of young people into the labour market would raise the youth unemployment rate if there were not enough jobs for the new workers. This problem would be aggravated by the simultaneous growth of the female labour force.

The extent to which the increase in the supply of young people has increased their unemployment depends in part on the extent to which firms have adjusted their production processes to take advantage of the large numbers of younger workers. On the one hand, the fact that the baby-boom created problems in schools and universities and in the housing market suggests that large demographic changes can be unexpected or, even if expected, can have substantial effects. On the other hand, employers do adjust their production processes to accommodate the large seasonal influx of younger workers. As stated by Feldstein and Elwood (1979, 9), 'If production can adjust so rapidly to the seasonal shift in the demographic composition of the labour force, it would be surprising if it could not adjust to the much slower change in demography over the past two decades. This leads us to believe that too much weight has generally been given to the demographic explanation of the rising teenage unemployment rate.'

Since the main contributor to this rapid growth in the youth labour force - the earlier bulge in the youth population - is now over, we can expect less pressure in the future from this source of labour market imbalance. In fact, the aging of the baby-boom population suggests that perhaps we should be concentrating on the adjustment problems of that group as it ages through the labour market. Whereas in the recent past we focused on youth unemployment policies, in the near future we may need to focus on such policies as adult re-training, recurring education,

and the re-entry of baby-boom age mothers into the labour force after a period of child-raising. Given our failure in the past to foresee the obvious problems associated with past demographic changes, there is no reason to be sanguine about future changes.

In addition to the adjustment problems caused by the influx of large numbers of young persons into the labour force, there have allegedly been problems resulting from their education, training, motivation, and attitudes. While it is difficult to document such problems rigorously, they are uppermost in the minds of many employers. This is clear, for example, in the report of the Skills for Jobs Conference (Ontario Manpower Secretariat 1978) and from a perusal of press reports on youth unemployment.

In the opinion of many employers, young workers do not have a practical education that has equipped them for the world of work (Lazar and Donner 1973, 305). Nor do we have an apprenticeship or training system that could supplement general education. Many employers believe that the educational system fosters counter-productive attitudes such as rising expectations, a distain for blue-collar and technical work, and a disrespect for authority. Employers may also judge frequent job changing by young people as another undesirable characteristic of youths. Whether such opinions on the part of employers are justified or not, they appear to be the prevailing opinions.

#### Demand-side factors

In addition to the factors on the supply side of the youth labour market, there are influences on the demand side that can affect youth employment, both absolutely and in relation to adult unemployment. To a large extent economists tend to play down the importance of demand-side factors (with the possible exception of cyclical fluctuations in the economy) largely because they believe that changes in demand should lead to changes in supply that will eventually restore the market to equilibrium. For example, secular changes in the importance of industries and occupations that employ young people can obviously affect the demand for young workers; however, if such changes are foreseen, then the labour-market, or supply, responses by youths, as well as by substitutes, should restore a long-run market equilibrium.

## Dual, segmented labour markets

Many have argued that there are forces, even in the long run, that prevent this process of market adjustment. The main argument of the dual, or segmented, labour market analysis is that segmentation of labour markets prevents the supply adjustments predicted by economic theory. Consequently pockets of what appear to be chronic maladjustments - high unemployment and low wages - can persist even in the long run. In fact, these maladjustments have a cumulative effect in that workers in the secondary or peripheral labour markets acquire characteristics that prevent them from leaving such markets. The poor working conditions, low pay, and dead-end nature of their jobs give them little incentive to perform properly and hence to advance into the primary, or core, labour market.

Dual labour market analysis has a number of implications for the youth labour market in general and youth unemployment in particular. It suggests, for example, that youths who start in jobs in the secondary labour market may develop undesirable characteristics that will keep them permanently in the secondary labour market, even when they get older. It also suggests that such symptoms of maladjustment as unemployment and low wages are a result of the nature of the labour market rather than, or at least in addition to, the characteristics of workers themselves. Even if youths had desirable human capital characteristics (education, training, and so on), the implication is that they might find themselves in the secondary labour market because they had been streamed into it.

Certain implications for government policy follow from the dual labour market analysis. Policies that affect the supply side - training, education, the mobility of workers, the way in which they look for work - will not be very effective because they will do little to help workers move from the secondary to the primary labour market, and because they yield few benefits within the secondary labour market. Policies to break down the barriers that prevent movement from the secondary to the primary labour market are usually rejected on the grounds either that they are not feasible or that they are undesirable because they would threaten the jobs of those workers fortunate enough to be in the primary labour market. The policies that are usually advocated by proponents of dual labour market analysis are the extension, usually by legislation, of the benefits existing in the primary labour market to the secondary labour market.



This can be done in a variety of ways including minimum wages and other forms of wage fixing, labour standards laws, and the encouragement of unionization. The fact that such policies may have an adverse effect on the employment prospects of workers in the secondary labour market is usually accepted as a necessary side-effect.

In short, then, dual labour market analysis does not seem to offer any obvious solutions to the problem of youth unemployment. In fact, high rates of youth unemployment may be a natural result of the policies - recommended by dual market analysis - that extend the benefits of the primary labour market into the secondary labour market, through minimum wages and labour standards legislation for example. While it may be that the segmentation of labour markets reduces employment opportunities for youths, it is more probable that any further implementation of the policies advocated by dual labour market theorists would reduce the employment opportunities of young people even more.

### Cyclical fluctuations in the economy

Perhaps the most important influence on the demand side of the market for youths is fluctuations in the business cycle. Obviously variations in output will lead to variations in the demand for young workers, and for a variety of reasons youths tend to be the first to be laid off when the economy enters a recession and the labour market slackens. They do not have seniority, are often on probation, and are not covered by union contracts even in unionized firms. They often lack the training that would make them valuable enough to the company to be retained during slack periods. Nor do they have the training or experience to do the variety of tasks required of workers during the shorter production runs that are common during slack times. Moreover, employers are probably less reluctant to lay off young workers because often they do not have families to support and in fact may have family income to fall back on. For those various reasons younger workers may experience disproportionate unemployment during times of slack economic demand. In addition, the magnitude of their unemployment may be hidden because many of them may become discouraged and stop looking for work during periods of high unemployment; hence they will not be recorded as part of our measured unemployment (Lazar and Donner 1973).

## Substitutes for youth labour

Of prime importance in assessing the influence of changes in demand, including cyclical fluctuations, is the extent to which other factors of production are available and can be substituted for youth labour. In general, because of their lack of experience and training, young people are probably quite vulnerable to being replaced by other factors of production, such as capital or other kinds of worker.

Thus the large influx of women into the labour force that has occurred at the same time as the influx of youths puts downward pressure on the demand for youths, especially since both are competing for many of the same jobs. Similarly the large influx of immigrants that has gone on until recently is additional downward pressure, to the extent that immigrants, even when relatively skilled, may compete for entry-level jobs. The proposal to raise the mandatory retirement age (as has been done in the United States) may also increase the availability of older workers, who may compete with younger workers for certain jobs. However, the effect on youth employment cannot be predicted since more older workers may be laid off because their employers cannot count on their automatically leaving at a certain retirement age.

While it is clear that the availability of substitute labour including women, immigrants, and older workers may have an effect on the demand and hence the employment prospects for young workers, we know little if anything about the actual extent of these substitutions. Without such information, it is difficult to know how much of the past and current youth unemployment can be attributed to the supply influences of those groups, and it is difficult to predict what changes in the youth unemployment problem can be expected as a result of policies that affect the size of these substitute groups, notably immigrants and older workers. Perhaps most important from a policy point of view, it is also impossible to know the extent to which policies intended to reduce youth unemployment might affect the employment prospects of those other groups. This possible displacement will be elaborated upon in the discussion of Ontario's public programs.

## Matching of supply and demand

In addition to the various supply and demand factors having an influence

on youth unemployment, the matching - or more aptly, the mismatching - of the supply and demand factors may also have an influence. It could be argued, for example, that the various changes in supply and demand discussed above would not really affect unemployment if relative wage adjustments or other adjustments could occur to facilitate the matching of the ever changing supply and demand.

### Minimum wages

The minimum wage is the factor most often cited as preventing the wages of young workers from adjusting themselves so as to prevent any increase in their unemployment. Young people, especially teenagers, are particularly susceptible to increases in the minimum wage because their lack of training and experience puts them at the low end of the wage spectrum. In fact, minimum wages have been criticized on the grounds that they prevent young people and other low-wage workers from acquiring the experience and on-the-job training that could raise their wages and employment opportunities as they get older.

Increases in the minimum wage will increase unemployment as firms substitute other factors of production (including skilled labour) for low-wage workers and as some firms reduce their scale of output or go out of business because of the increases in wage costs. The magnitude of the adverse effect on employment will depend on the elasticity of the derived demand for labour (i.e. the extent to which employment is reduced as wages increase). In industries most affected by the minimum wage, however, the demand for labour is probably quite elastic, and hence the adverse effect on employment is substantial: labour costs are often a large part of total cost, it is easy to substitute other factors of production for minimum-wage labour, and it is difficult to pass the cost increases on to consumers in the form of higher prices without causing a substantial reduction in the demand for output and hence the derived demand for labour. Thus it appears that minimum wages can substantially reduce employment opportunities for young people.

The ultimate effect of the minimum wage on youth unemployment, however, depends both on the reductions in the demand for labour and on the labour supply response of young people. It is possible, for example, that the higher minimum wage induces young people to withdraw from the

labour force, and if this outweighs the reductions in the demand for labour, then measured youth unemployment may decrease in spite of their reduced job opportunities.

The empirical evidence on the effect of minimum wages on youth unemployment is difficult to summarize, in part because of the different methods and data employed. In general, U.S. studies find that minimum wages have a substantial adverse employment effect for youths (e.g. Moore 1971, Kusters and Welch 1972, Katz 1973, Welch 1976, Mincer 1976, Ragan 1977, Welch and Cunningham 1978, Matilla 1979). However, the reduced job opportunities also cause youths to withdraw from the labour force, so that the effect on measured youth unemployment is not as great as the reduction in their employment (Mincer 1976, Matilla 1979).

Some recent Canadian evidence also confirms the substantial reduction in employment opportunities for young people as a result of increases in the minimum wages in Canada. Swidinsky (1980) finds the reduction in employment opportunities to be greater for females than males, but because the concomitant withdrawal from the labour force is greater for males than females, the increase in measured unemployment is small for males and larger for females. Specifically, between 1956 and 1975, the addition to the teenage unemployment rate resulting from increases in provincial minimum wages was 1.6 percentage points for females, 0.8 for males, and 1.2 for both sexes. There are some notable regional differences: in Ontario the reduction in labour force participation is strong enough to outweigh the reduction in jobs so that youth unemployment may actually fall slightly as a result of increases in the minimum wage.

Recent studies by Fortin (1979) and Cousineau (1979) of the minimum wage in Quebec also find substantial adverse effects on employment especially for young people. Fortin also cites evidence that over 80 per cent of minimum-wage workers are young persons (mostly living with their parents), unattached individuals, or the second wage-earners of childless families, all of whose family incomes are considerably higher than Statistics Canada's 'low-income levels.'

Union wage-fixing *above the competitive norm*

Unions, of course, can also fix wages above the competitive norm. Because of queues of applicants that result from a reduction in the number



of jobs, employers are able to ration the scarce union jobs and will probably do so on the basis of factors related to productivity such as training and experience, thereby reducing employment opportunities for young people. Unions, which emphasize seniority and the rights of union members, are not likely to give up that protection in order to make more jobs available for young people. As pointed out by Medoff (1979), the unemployment that results from unions' preference for wages over employment stability tends to fall on junior union members.

Similarly unions tend to resist work-sharing whereby reductions in demand could be spread amongst the workers as reductions in hours rather than in increased unemployment for a few, especially young people. Their resistance stems in part from the belief that unions have fought long and hard for a modicum of job security for their members and that they should not have to give that up because the government's mismanagement of the economy has resulted in high unemployment. As pointed out in Reid (1979, 28, 29), unions often consider work-sharing as unemployment-sharing, which would reduce the pressure on governments to solve the problems of unemployment.

Clearly all forms of wage-fixing may have an effect on unemployment in general and youth unemployment in particular, especially because youths are probably 'the first to go' when wages are set above the competitive norm. The problem for policy-makers, of course, is to decide whether the benefits of wage-fixing outweigh the costs in fewer jobs. Before that choice is made, more information is needed about the size and incidence of employment reductions, the extent to which these increase unemployment, whether the adverse consequences can be offset or mitigated in other ways, and whether the purposes of wage-fixing can be attained by other policies that will not reduce the number of jobs.

#### Labour market information and the search for jobs

Although the mismatching of supply and demand in the youth labour market may be caused by various forms of wage-fixing, it may also be a natural result of the peculiarities of the youth labour market; i.e. it may, at least to a certain degree, be the rational outcome of the acquisition of information by employers and workers and the search by young workers for jobs.

For young workers the benefits of additional search and information are high because they have more years ahead of them in which to benefit. Moreover, the cost of search is probably lower for young workers. Their forgone income (i.e. their opportunity cost) is lower, they have weaker ties to their job and community, they are not locked in by pensions or seniority, they probably have family income and education or household activities to fall back upon, and the costs of search may be partially offset by unemployment insurance.

To the extent that the benefits of additional search are higher and the costs lower for young people, it may be quite rational for them not to take the first job they find, to leave undesirable jobs, and to shop around for the right one. This is because a young person's first jobs may channel him or her into a lifetime career that is difficult to change. (As discussed earlier, early experiences with being out of work may also lead to poor work characteristics that are difficult to change).

Similarly, employers will not have much work information about young workers, and a rapid turnover of young people may be a sensible way for employers to learn about their young employees before making long-term commitments. In short, one may expect more frictional or search unemployment among youths than among adults. The latter are more likely to obtain information about other jobs while already at a job.

That is not contradicted by the observation made earlier that the duration of unemployment is shorter for youths than adults. Youths may simply be sampling more jobs, between which they have frequent short periods of unemployment.

#### Matching of job demands with human capital supply characteristics

The observation that youths may engage in more job search and hence experience more frictional unemployment is not meant to imply that there is no problem in the matching of the job demands of employers with the human capital supply characteristics of youths. In fact, as discussed earlier, casual empiricism suggests that employers consider youths - and perhaps educated youths especially - to be ill equipped for the world of work. Their education and training are of little practical use and in fact may be harmful to the extent that they simply teach them to expect more without equipping them to cope with these high expectations. Moreover

increased education makes young people reluctant to do blue-collar technical jobs. There appears to be little prestige in such jobs, unlike white-collar jobs, which appear more socially acceptable.

Young people, on the other hand, often have an equally dismal view of the jobs offered them by employers. Many of those jobs appear to be boring, dead-end, unchallenging, uninteresting, and requiring rigid work schedules - admirably suited to their parents, but not to them!

Whether correct or not, these negative perceptions on the part of both employers and employees can have an effect on whether or not workers are matched with jobs. Misapprehensions may with time be corrected if they are costly, and people may adapt to the realities of the market. Even a boring job may become attractive if one cannot find another, and even an overly educated youth may be acceptable to an employer who cannot find anyone else.

In addition, there is market pressure for both employers and employees to adapt, respectively, jobs and skills to the demands of the other party. To attract young workers, firms have an incentive to adapt their jobs to the young workers: job enrichment, improvements in the quality of work-life, and flexible working hours are obvious possibilities - and they will emerge as employers find them to be profitable policies. Similarly younger workers have an incentive - that of job opportunities - to acquire the skills, including blue-collar technical skills, required by employers. The dramatic movement of students towards professional, job-oriented degrees in universities, the success of co-operative work-study programs, and the increasing popularity of community colleges are evidence that in a reasonably short time young people will adapt - some may say too readily - to the realities of the labour market. Even the alleged shortage of skilled blue-collar workers, a shortage that results in part from the low status of technical jobs, would probably reverse itself if wages in such jobs became high enough.

### Rigidities in the wage structure

Rigidities in the wage structure can obviously create a mismatch between labour supply and demand. Involuntary youth unemployment, for example, could be reduced by lower wages for young people and by wage premiums for the skilled blue-collar technical jobs that young people

appear reluctant to train for.

Minimum wage laws and other forms of wage fixing were discussed above as barriers that may prevent young people from working at low wages while they acquire experience and on-the-job training. Union agreements may also discourage training - for example, with clauses that do not allow a union worker to accept a wage cut while being trained or clauses that fix high ratios of journeymen to apprentices. The egalitarian policies of unions may also militate against the payment of premiums for certain blue-collar technical skills; this could follow, for example, from their policy of negotiating absolute wage increases that are roughly equal for all their members, which implies smaller proportional wage increases at high wage levels. The lack of wage premiums for certain skilled blue-collar technical workers of whom there is an alleged shortage has also been made possible by the fact that, until recently, Canada has been able to rely on immigration as a source of skilled labour.

This alleged shortage of skilled blue-collar workers, however, is particularly difficult to understand. Specifically, it is difficult to understand why the markets do not adjust to take care of the shortage. Perhaps they are adjusting and we are simply in a temporary disequilibrium. Or perhaps the shortages are the 'equilibrium shortages' that occur in monopsonistic firms (Gunderson 1980, 168-9). Perhaps they are simply the natural result of random shocks in a system that requires time for workers to be trained.

It is understandable that individual firms do not try to fill these shortages by training workers unless the workers accept a lower wage during the training period. If the training is usable in other firms, then the training firm runs the risk of losing its trainees to firms that do not train but simply pay wage premiums to trained workers. Since the trainees receive the benefits of generally usable training in the form of higher wages and chances of employment, they should have an incentive to bear the cost, perhaps a reduced wage during the training period.

This brings us back to the possibility that there are rigidities in wages that may prevent wages from going low enough for employers to employ or train young people or that may prevent wages from rising enough to encourage young people to enter certain skilled blue-collar jobs. However, wage structures are not immutable in the long run; they can and do change in response to labour market forces. Because wage rigidities

impose excessive costs on all parties, there is a strong incentive for those rigidities to be bargained away in the labour market or for the parties to urge governments to make changes.

The problem for policy makers is to ascertain the advantages and disadvantages of the wage rigidities and, where the disadvantages are excessive, to find ways of reducing the rigidities. In order to do so we need more information about the extent to which our wage structures have been affected by the availability of skilled immigrant labour and the extent to which unions will give up elements of wage rigidity in return for other compensation. Research is also needed on whether the chronic shortages of certain skills are real or imaginary and whether they are 'equilibrium shortages' resulting from such factors as monopsony or simply from random shocks.

## ONTARIO GOVERNMENT PROGRAMS

The problem of youth unemployment has not gone unnoticed in Ontario; in fact the response has been dramatic, at least as measured by the number of programs that have been established to deal specifically with this problem. Employment Opportunities for Ontario's Youth describes thirty-three programs and eleven services that have been created to help young people obtain jobs. (See Appendix B.) This section describes those programs briefly and discusses some other programs that may have an (unintended) effect on youth unemployment.

In keeping with the discussion of the determinants of youth unemployment above, the various programs are categorized as to whether they affect the supply or demand side, or the interaction of supply and demand. Although in some sense every government program can have some effect on youth unemployment, this section will concentrate on the programs intended mainly to deal with youth unemployment.

### Supply-side programs

Many of the supply-side policies have already been alluded to in this paper. Specifically, the role of our educational institutions has been discussed along with the opinion that they may not be providing youths with practical knowledge for the world of work. It has also been noted



that policies that may affect the supply of other workers (e.g. the abolition of mandatory retirement, which may increase the supply of older workers) could affect youth unemployment. Policies that affect the participation of women in the labour force (e.g. day-care subsidies, deduction of child-care expenses, equal pay, and fair employment laws) could have a substantial effect in this regard because this is a group that often competes directly with young people for jobs.

There are also labour market information programs. The Ontario Youth Secretariat visits high schools to provide information on provincial employment programs, methods of looking for jobs, and the writing of résumés. Brochures on employment programs sponsored by governments are also distributed to young people, agencies and institutions that serve them, and employers. Each Canada Employment Centre has self-help and job search booklets and pamphlets written specifically for young people. The Ontario Ministry of Education also has a computer information system (Student Guidance Information Service) to assist schools in their career and education counselling; it gives information on careers, training programs, post-secondary institutions and guidance. The Industrial Training Branch of the Ontario Ministry of Education has established Career Action Centres, through community colleges, to integrate career counselling with specific community needs. And to help co-ordinate the many programs run by various government departments and jurisdictions, notably the federal government, the Ontario Ministry of Labour has established the Manpower Co-ordinating Committee.

At the federal level the Canada Employment and Immigration Commission offers various special information and job search services for youths including a special Services to Youth in each Canada Employment Centre, special Canada Employment Centres for students and Canada Employment Centres on university campuses, special Youth Employment Centres in regions of high youth unemployment, and school liaison counsellors to help prepare secondary school students for entry into the labour force. Those are all in addition to their regular employment service provided to everyone.

There are also training programs. Many of the youth employment programs listed in Appendix B have a substantial training component. This is the case, for example, with the Job Experience Training Program, the Ontario Career Action Program, and many of the Experience '79 pro-

grams such as Students in Personnel or Student Training in Industrial Relations.

In addition the federal and provincial governments co-operate in their main training programs throughout Canada. The Canada Manpower Training Program (institutional) provides mainly institutional training in community colleges and vocational schools, including the classroom portion of apprenticeship training, language training, and occupational skill training. The Canada Manpower Industrial Training Program (on-the-job) reimburses employers who provide on-the-job training in particular skills. Neither of these training programs, however, was designed particularly with young people in mind. The industrial on-the-job training is geared to industry's need for specific crucial skills and often consists of upgrading relatively skilled and experienced workers. The larger, institutional component involves more basic training, largely through schools and colleges; nevertheless, young people are not greatly overrepresented in this training, in part because of the requirement that participants be at least 17 and have been out of school for at least one year.

Apprenticeship training in Canada has often been criticized for not providing an alternative to formal education for many of our young people.

The Canadian apprenticeship system is more like the American system than European systems. Its primary purpose is to develop specific skilled craftsmen rather than to continue the education of youth or bridge the gap between school and work. It involves a small fraction of the workforce and is used to meet the needs of only a few industries in a select number of occupations. Government intervention has been minimal and is usually confined to the monitoring of performance and setting of standards required by employers. Financial support is usually limited to classroom instruction. In addition, apprenticeship training is adversely affected by cyclical fluctuations in the economy. In periods of prosperity, employers often rely on outside hiring and shorter on-the-job training, rather than wait for skilled craftsmen to emerge from the apprenticeship programme; in recessions, employers are often unable to provide the steady employment required for apprenticeship training. Partly for these reasons, apprenticeship training never really developed extensively in Canada, and certainly in recent years it was overshadowed by the rapid development of other forms of training (Gunderson 1977, 6-7).

Perhaps this may change to the extent that Canada can no longer rely on immigration as a readily available source of skilled manpower.

The above-mentioned education, information, and training programs are the most common ones that affect the supply side or labour quality of

youths entering the labour market. Other programs can affect the work incentives of younger workers, which in turn affect the number of young workers available and, what is discussed less often, their quality as well.

It is well known that income maintenance schemes such as unemployment insurance, wage subsidies, and welfare can reduce the incentive to work. They do this both by lowering the returns to working compared to not working and by raising the recipients' non-labour income, thereby enabling them to afford not to work as much. There are exceptions: for example, a wage subsidy may increase or decrease the incentive to work. These incentive effects apply to all eligible persons, not just youths.

While these potential adverse effects on work incentives are well known, what is less often discussed are the general equilibrium and dynamic effects. If work incentives are reduced, there will be a reduction in the total supply of labour and hence a rise in the wages of persons receiving income maintenance payments. Since these programs affect low-wage workers, there would probably be a rise in youth wages and an improvement in their job conditions as firms had to compete for the reduced supply of labour. In addition, the income maintenance programs may enable recipients to engage in productive job search or human capital formation, and in the long run this may improve their prospects for employment.

### Demand-side programs

Recently there has been a resurgence of interest in the demand side of the labour market. This may be partly because of the failure of the human-capital, supply-side policies to solve most of the labour market problems; the realization that raising wages through wage-fixing may be harmful if the jobs are not there; and the slow growth of the 1970s. This emphasis on the demand side can be seen in various programs including wage subsidies, employment tax credits, job creation in the public sector, and concern with stabilization policy.

#### Wage subsidies

Wage subsidy programs consist of a guarantee by a government to pay a fixed wage or a certain portion of a designated employee's wages in the



private sector. (Similar subsidies within the public sector are discussed here as job creations in the public sector). Examples in Ontario in 1978 that apply to youths are the Ontario Career Action Program (\$100 a week), the Ontario Youth Employment Program (\$1.00 an hour subsidy), and the Job Experience Training Program (50 per cent of hourly wage to a maximum of \$1.50 an hour).

By subsidizing the wages of youths, the government intends to encourage employers to hire more young workers. The danger, of course, is that younger workers may simply displace others, and that unemployment will be shifted but not really reduced. There is also the possibility that employers may lower their portion of the wage (if they pay a portion) because of the government subsidy. The incentive to do so is less under the percentage wage subsidy than the fixed wage subsidy because, in the percentage wage subsidy, the size of the subsidy decreases if the employer's portion is lowered. As Burton (1977) points out, the wage subsidy may also enable unions to demand even higher wages, knowing that any resulting unemployment may be mitigated by a wage subsidy.

Various forms of wage subsidies are possible. As mentioned earlier, they could be a flat subsidy or a percentage of wages. (The latter may also encourage human capital formation, such as education or training, because the returns in the form of higher wages would be augmented by the subsidy). They could only be for new hires or net new hires, although this can present monitoring problems. And there could be a maximum payment, although this can create discontinuities, or 'notches,' if fairly substantial subsidies are given up to the ceiling but none at all thereafter.

### Employment tax credits

Employment tax credits can be used for the same purposes as wage subsidies, and with similar results. Just as tax credits can encourage investment in physical capital, they could also encourage the use of labour. As Kesselman, Williamson and Berndt (1977) point out, various forms of employment tax credits are possible. They could be universal (applicable to all labour) or selective (applicable to particular regions, industries, or types of labour such as youths). Selective tax credits, of course, induce a firm not only to use labour but to use a particular type of labour. Em-

ployment tax credits could be a fixed amount per worker, in which case they would encourage a substitution towards low-wage labour since the proportional subsidy would be higher; or they could be a percentage of the wage bill. In addition the employment tax credit could be based on the employer's existing workforce or only on additions to that workforce. The federal Employment Tax Credit Program provides tax credits for new jobs that use unemployed workers; however, the workers need not be youths.

### Job creation in the public sector

Various jobs have been created in the public sector with a view to providing young persons with work experience. Job creation may be a misnomer, however, since young people would probably have been hired for many of these jobs in any case.

The largest of these programs are Experience (students 15-24 who have never been employed work in various ministries); the federal Young Canada Works (students registered with Canada Manpower and intending to return to school work in community projects); and Youth Job Corps (youths 16-24 work on projects sponsored by governments).

### Overall stabilization policy

Stabilization of the demand for labour is of course crucial in maintaining employment, including that of youths. Because youths are the hardest hit by downturns in the economy, the maintenance of demand is particularly important for them.

The maintenance of total demand for labour is particularly attractive because it does not require an administrative machinery, it does not run the risk of increasing the unemployment of other groups, as can be the case when youth employment is subsidized, and it ensures that the output of the job has some market value. Its cost, of course, is the well known possibility of high inflation, which is associated with too much total demand.

Also, there is still considerable debate in the literature about the effectiveness of government stabilization policy, at least in the long run. Monetarists argue that much unemployment is voluntary, representing

optimal search, job search, or a response to unemployment insurance. Government stabilization policies cannot affect the overall unemployment rate in the long run, and the rationale for government intervention clearly is reduced. For this reason, the debate over the effectiveness of stabilization policy on youth unemployment is part of the larger monetarist-Keynesian debate over the extent to which unemployment is voluntary or involuntary.

### Programs that affect the matching of supply and demand

Reference has already been made to many of the government programs that can affect the matching of supply and demand on the labour market. Minimum wage legislation and equal pay legislation both could drive a wedge between the workers' asking price and the employers' offer, thereby reducing employment opportunities for the groups, including youths, affected by these policies.

While these programs can induce a mismatching of supply and demand, many other government programs are designed specifically to facilitate the matching of supply and demand. Many of the labour market information programs discussed above in the section on the supply side also provide employers with information and hence facilitate the matching process. Employment offices, which have numerous special programs for youths, exist specifically to aid the matching process. Labour market forecasts of general conditions and of expected shortages and surpluses can also facilitate the matching process by helping both employers and employees adjust their decisions to the changing demands of the market. Proper forecasts have the advantage of enabling the various parties to adjust to market demands, rather than artificially creating market demand (like wage subsidies) or reducing them (like minimum wages).

### EVALUATION OF YOUTH EMPLOYMENT PROGRAMS

Given the large number of programs that exist mainly or exclusively to help young people find jobs, the logical question from the point of view of government policy is: do they meet their objectives? Only a complete cost-benefit evaluation could answer that question, but, because of problems of data and methodology, that is probably not feasible. However, it

is possible to give a general evaluation of the various programs. Rather than evaluating all the programs, I shall emphasize their general nature and most important features and delineate the advantages and disadvantages of each. The program evaluation criteria, which are based on those given in Weisbrod (1969), are: administrative costs, vertical and horizontal efficiency, allocative efficiency, non-demeaning benefits, and flexibility over time.

#### Minimizing of administrative costs

Clearly it is desirable that any public program be designed to minimize the administrative cost of achieving the program's objectives. Overall stabilization policy, for example, has the potential to increase youth employment without requiring a bureaucratic framework to administer the programs. The creation of jobs in the public sector also requires a minimum of administrative costs over and above the normal hiring costs. Wage subsidies, however, do have administrative costs, and they can have monitoring costs if the subsidies are only for new employees who would not have been hired otherwise. Employment tax credits can be administered through the existing tax system, although ones based on the number of designated employees (rather than simply the wage bill) would require additional information.

Supply-side programs can have substantial administrative costs especially if one includes the cost of operating the program. Training and labour market information programs can be extremely expensive to administer.

#### Vertical and horizontal efficiency

Vertical efficiency refers to the degree to which the benefits of the program stay within the target group (youths) without spilling over into non-target groups. Horizontal efficiency refers to the degree to which the program helps all persons within the target group, and helps them sufficiently.

Supply-side programs, such as training and labour market information programs, and demand-side programs, such as wage subsidies, tax credits, and job creation in the public sector, can all be aimed at youths

simply by making only youths eligible. Similarly, a different minimum wage for youths could facilitate the matching of supply and demand for that particular group. Therefore it is feasible to contain the job-creating benefits of such programs within the youth labour market.

But there are disadvantages. Specifically, the increase in jobs for young people may mean fewer jobs for others; youths may simply displace other groups, and that is difficult to prevent. In addition, restricting these programs to youths may create resentment amongst other groups who feel they are at an equal or more severe disadvantage. This is especially the case for those who are slightly too old to be eligible. The restriction of the programs to young people necessitates an age cut-off, and someone will always be just beyond the cut-off; this is true wherever eligibility restrictions are necessary.

Stabilization policies, on the other hand, are non-selective in that the employment benefits of expanded demand will spill over into a variety of groups besides youths. In point of fact, this is one of their strengths. Both theory and empirical evidence suggest that the tight labour markets associated with expansionary demand are especially helpful for disadvantaged workers. To the extent that youths are among the disadvantaged, then they too will benefit.

Horizontal efficiency - the benefiting of all within the target group sufficiently - can only be attained at great cost. Clearly some youths in need will be bypassed by the various programs, and others will not be helped enough. Only by pumping additional money into the programs can one attain horizontal efficiency, but that is costly and also unfair to other groups that do not receive assistance and that may even be displaced by the youth programs. Again, stabilization policies have the virtue of at least affording all young people a greater chance of finding jobs.

### Allocative efficiency

Some argue that efficiency in the allocation of resources is attained by a minimum of government interference in the market except perhaps to remove market imperfections and to provide information about the market to the participants. Others argue that efficiency as a criterion makes little sense in a labour market that is already segmented and riddled with imperfections and non-economic constraints or that equity and fairness are



more important than efficiency. And yet others may invoke the theorem of 'second best,' arguing that because of imperfections and non-economic constraints in related markets (monopolies, capital depreciation allowances, foreign trade dumping), it makes little sense always to follow efficiency rules in the labour market. The existence of unemployment above what appears to be frictional, or equilibrium, unemployment also raises doubts about market efficiency.

Without trying to resolve this debate over the relevance of the efficiency criterion, it is still possible to examine some of the youth labour market programs with this criterion in mind. On the matching of supply and demand, labour market information programs can make the allocation of labour in the labour market more efficient. Because information about the labour market contains elements of public goods (i.e. the information may be available to all, and the market does not automatically extract payment), the private market may provide less information about the labour market than is socially optimal. Hence, there may be a legitimate efficiency reason for governments to provide information about the labour market. Similarly, a different minimum wage for young people could make the labour market more efficient by preventing the mismatch of supply and demand that can occur if the general minimum wage applies to youths.

The case for government intervention in training programs to achieve allocative efficiency is less strong (e.g. Gunderson 1974), although it is feared that employers will not pay for training because they will probably lose the trainees to companies that do not train but rather 'poach' trainees by offering high wages (Mehmet 1970). As discussed earlier, however, this raises the question of why the trainees do not pay for such training themselves. If market imperfections prevent trainees from paying for general training, then a tax on the whole industry becomes worthy of consideration.

Some of the demand-side programs are justified with the argument that they offset the adverse effects on other programs. Wage subsidies, for example, may be regarded as offsetting the adverse effect on employment of minimum wages; the wage subsidy makes up the difference between what the government deems should be paid (the minimum wage) and what the employer would otherwise pay. Similarly, employment tax credits may be regarded as simply neutralizing the effect of tax advantages that favour capital, such as depreciation allowances.

While appealing at first glance, such arguments should be viewed with caution. Two inefficiencies need not lead to efficiency; they may simply be additive, not offsetting. The fact remains that wage subsidies and employment tax credits encourage companies to use more of the subsidized labour than they otherwise would. Clearly there is a danger that a firm may use young workers who are not good at the job when older workers or capital would be more efficient were it not for the subsidy. Such an event is probably not in anyone's interest, even the young worker's.

The creation of public sector jobs for youths can likewise be inefficient if the young people are hired, not because of a need, but rather to fill a quota or because the cost was paid elsewhere. Working on make-work projects may be just as disillusioning to young people as not working and just as disruptive to good work habits and reasonable expectations in the long run.

Stabilization policy on the other hand would minimize allocative inefficiencies because it works through the market mechanism to increase employment. It is 'non-margin-distorting' in the sense that the demand for all inputs (i.e. capital as well as labour) is increased. In fact one could argue that high aggregate demand induces efficiency in that it makes possible the full use of slack resources, and, according to Okun's Law, output is increased more rapidly than measured inputs.

### The provision of non-demeaning benefits

The provision of non-demeaning benefits, that is, ones that do not destroy the recipients' self-respect, can also be regarded as a program objective. In general, the more that benefits are aimed at one particular group, especially the disadvantaged, the more demeaning those benefits become since the group becomes more readily identifiable as one that requires assistance. On the other hand, if benefits are not aimed at the target group by such things as eligibility requirements, then they will spill over into non-target groups that need the benefits less.

An institutional training program will have a social stigma attached to it if it means that one lacks basic skills. Programs of wage subsidy, tax credit, and public sector job creation can also confer a stigma when the individuals are readily identifiable. Nevertheless, the stigma of taking part in such programs is probably not as great as that of receiving un-

employment insurance or welfare or being unemployed. Overall stabilization policies for sustaining aggregate demand, labour market information programs, and differences in minimum wages for young people are policies that, since they apply to a broad range of people, do not carry a stigma.

### Flexibility

Programs should be flexible enough to meet the rapidly changing conditions of the labour market. Once established, government programs can develop a life and rationale of their own, with a bureaucratic, vested interest in the maintenance and expansion of the program even if the original needs have dissipated. In essence, Say's law of supply creating its own demand may operate, and they may become programs in search of a problem.

This is a very real danger with special youth programs because the problem may dissipate in the 1980s as the proportion of youths in the labour force diminishes. The key policy question becomes: can the programs adjust to the changing nature of the problem as the population ages and possibly has new problems such as upgrading, continuous education, and re-training for those who have temporarily left the labour force? The new goal may not be to facilitate entry into the labour force, but rather to facilitate re-entry, upgrading, and ultimately gradual withdrawal from the labour force into early retirement.

Whether our programs of education, training, and labour market information can adapt remains an open question. There will probably be more need for on-the-job training, which emphasizes the upgrading of specific skills, and less need for institutional training, which emphasizes basic skills for the young and for immigrants. Adult and continuing education will take on even greater importance. There will be a need to forecast the supply of, and demand for, labour caused by the aging of the labour force.

The demand-side programs of wage subsidies, employment tax credits, and public sector job creation offer considerable flexibility because they have not built up groups with a vested interest in providing the services. The only danger is that some private firms may have come to rely on these subsidies.

General stabilization policies offer more flexibility since they can be adapted quickly to changing conditions. A youth minimum wage, on the

other hand, would acquire a degree of irreversibility, since many employers would adjust their production processes to this new element of labour costs.

## SUMMARY, POLICY IMPLICATIONS, AND RESEARCH NEEDS

Like all summaries and policy discussions, this one will gloss over some important details and qualifications in order to step back from the myriad of details and assess the more general picture in the context of a labour market policy.

### Summary

The issue of youth employment is at present very real. Young people have much higher unemployment rates than the rest of the population, and that, coupled with the fact that they now make up a substantial portion of the labour force, results in their constituting almost half of the unemployed. Young people have always had high unemployment rates, however. In fact, over the last three decades the ratio of youth to adult rates for males has been remarkably stable. It has increased dramatically for females, especially women aged 20-24; however, this has been part of the larger picture of increasing unemployment rates of females in relation to males in general. In this context, the current high rates of youth unemployment should be viewed as part of the problem of high unemployment rates for everyone, especially females. The structural nature of the problem for young people appears to have changed very little.

Of the hardship of youth unemployment it is possible to paint different pictures. On the one hand their unemployment does not last long; many seek only part-time jobs, have never worked before, and have family income to fall back on; their disguised unemployment is small in that few are involuntarily working only part-time or are involuntarily out of the labour force; and many are only sporadic members of the labour force and have a primary attachment to school. On the other hand, the duration of their unemployment is not much shorter than that of older persons; most are seeking full-time work and are unemployed because they were laid off; and many may be in school simply because jobs are not available. On balance it appears that the hardship is not as severe as that of adults who

are unemployed, but it cannot be dismissed as minor.

The large influx of young people into the labour force was bound to create problems, especially since it was accompanied by increased participation in the labour market by women and new immigrants. This problem was compounded by the belief by many employers that young people are poorly trained, expect too much, and have poor work attitudes. Economic stagnation, especially in the 1970s, contributed to youth unemployment, particularly since youths are often the first to be laid off in economic downturns. Increased wage-fixing and rigid wage structures, caused especially by increases in the minimum wage, also reduced the number of jobs for young people. These facts, along with the very high level of frictional or optimal youth unemployment associated with job search, can explain much of the high and rising rates of youth unemployment.

Whether or not the problem of high youth unemployment will continue into the 1980s remains an unanswered - and extremely important - question. The problem of youth unemployment will probably dissipate as youths make up a smaller portion of the labour market, but the adjustment problems for these workers as they move through the labour market will continue, requiring the adoption of some interesting policies.

Partly in response to the problem of youth unemployment, Ontario had developed an array - some would say a bewildering array - of programs. Over thirty programs pertaining directly to youths were discussed as they affect the supply side (education, training, job search); the demand side (wage subsidies, employment tax credits, public sector job creation, and overall stabilization policies); and the matching of supply and demand (wage fixing and labour market information).

These programs were then analysed according to several criteria pertaining to administrative costs, horizontal and vertical efficiency, allocative efficiency, non-demeaning benefits, and flexibility over time. Not surprisingly, youth unemployment programs that were successful according to some of the criteria failed to meet others.

### Policy implications

Because of the various advantages and disadvantage of the different programs, governments will have to choose combinations of the programs and of complementary policies so as to minimize the adverse effects. Of the



various policies to assist youth employment, stabilization policies for sustaining aggregate demand were desirable according to most of the program evaluation criteria. Labour market information programs also met most of the criteria. In the other programs there were conflicts between the various criteria. This is especially the case with supply-side programs such as education and training.

The possible conflict between the criteria can be illustrated by one logical policy, that of giving the wage subsidy directly to the employee rather than to the employer - a voucher scheme for wage subsidies. By being aimed at specific employees the vouchers can help in attaining vertical and horizontal efficiency; that is, their benefits will not spill over into the non-target groups and they can help as many in the target group as much as policy makers would like. Vouchers would also encourage workers to search for jobs because the voucher goes with the worker, not the job; in this sense, an element of allocative efficiency is attained. There is also an element of non-demeaning benefits to the voucher in the sense that employers will be competing for the otherwise disadvantaged workers who now have the voucher. On the other hand, the voucher may have elements of a social stigma to the extent that 'voucher-workers' are easily identified, and there may be an element of horizontal inequity since other similar workers do not receive the voucher. Some of those problems could be minimized if one were very selective as to who receives the vouchers and if the voucher were tailored to the individual, but this increases the administrative costs. As always there are trade-offs.

In view of the array of programs, we need to ask if there is overkill. It is possible that many students coming into the labour market today no longer think of what jobs they should search for in order to achieve certain long-run career aspirations, but rather what program they should take part in? It is possible that employers think less of how to recruit young workers to revitalize their workforce and more of how to minimize labour costs by obtaining government subsidies? Is it possible that competition for jobs and for young recruits is being replaced, in part at least, by competition for government programs?

The myriad of programs also makes co-ordination not only desirable but a vital necessity. Of particular importance is the co-ordination of the programs with macroeconomic stabilization policy. Some programs, like job creation in the public sector, can have a counter-cyclical effect by adding

to aggregate demand unless, of course, the jobs would have been filled without the subsidy. Others, like wage subsidies, can provide the possibility of 'cheating the Phillip's curve' (Baily and Tobin 1977) by encouraging the use of workers in excess supply whose market wage is less prone to rise. Yet others, like training programs, will have lower opportunity costs during times of slack demand, and their output of trainees in tight labour markets may ease inflationary pressures resulting from shortages of skilled workers.

Equally important, it is necessary to regard youth unemployment policies within the context of labour market policies in general and policies to assist the disadvantaged in particular. Without co-ordination of the programs that affect various groups, not only is duplication possible, but also some programs may work at cross-purposes. What is needed is a clear description of objectives and a ranking of priorities when conflicts occur. Regarding youth programs in the context of a rational labour market policy will become more important as the population bulge that created so much of the youth unemployment problem ages, perhaps creating different adjustment problems.

Policy-makers are confronted by another policy dilemma. If an abundance of help is given to youths to facilitate their entry into the labour market, it may create rising expectations, the retention of an unrealistically high reservation wage, and a permanent dependence on government help. Eventually, both employers and employees will presumably have to adjust to certain labour market realities. Does early assistance ease the adjustment, simply postpone it, or possibly even compound the adjustment problem? On the other hand, if assistance is not provided and youths become unemployed, this may decrease their chances of subsequent success, perhaps because employers regard this as a sign of poor work skills, or because the employee develops attitudes such as a sense of alienation or lack of confidence that are not conducive to subsequent success. Clearly there is a problem here for policy-makers, and the solution requires knowledge of how youths are permanently affected by early unemployment: does it reduce their expectations to realistic levels, or does it cause irreparable damage?

Of the permanent effect on the subsequent labour market behaviour of youths, various labour market theories offer conflicting predictions. Proponents of dual labour markets would argue that the long-run effects are cumulative and can lead to irreparable damage. Proponents of the

job-search theory would argue that early unemployment may be a sign of a rational job search that will lead to better jobs. In addition, the unemployment may serve to lower unreasonable reservation wages.

The limited empirical evidence, based on U.S. data, does not lead to conclusive results. Stevenson (1978) finds that early unemployment leads to subsequent lower earnings; however, Osterman (1978) and Becker and Hills (1978) find that, for white youths but not for black, there are no long-run adverse consequences. Clearly this is a question in need for more research, especially in Canada.

It appears that most special programs for young people in Ontario are not specifically intended for disadvantaged youths. Some, such as the Job Experience Training Program and the Ontario Career Action Program, may have requirements with respect to unemployment; yet most have not. This being the case, the persons who are accepted by the programs are probably not the most disadvantaged. In fact, in so far as it takes certain talents to apply for a program, they may already be relatively advantaged. This is a problem, of course, with many self-help programs: those who make the best applications tend to be successful, but they are the ones who are more likely to succeed in the labour market in any case.

A general evaluation of all youth employment programs in Ontario is not feasible from this study. Certainly the response of governments to the problem has been dramatic, as evidenced by the number of programs, and by co-ordination efforts, such as the Youth Secretariat and the Ontario Manpower Co-ordinating Committee. Still, the rate of youth unemployment remains high. Yet it is not unduly high in relation to the adult rates, at least by historical standards. The key policy question is: how much higher would it have been were it not for the special programs? And, if it is pushed lower, what will this do to the employment prospects of other groups? Perhaps the real success of these programs will be judged in the future if they are required to adapt to new problems associated with an aging labour force and with different demands caused by the retooling and redesign of industry that may come about from environmental control, tariff reductions, and conversions to energy-saving devices.

### The need for research

The need for more research was alluded to throughout the paper. Basically two kinds are needed: specific information for specific programs; and

general information, usually empirical, that would be useful for analysing all programs.

With respect to the latter information it would be useful to know such things as the elasticity of substitution for different types of labour and for other inputs (to see if an increase in youth employment simply reduces other employment); the elasticity of the derived demand for youth labour (to ascertain the adverse employment effects of wage fixing); and the elasticity of supplies of different types of labour (to see how supply responses may mitigate or offset program effects). We also need general knowledge of the cyclical nature of youth employment opportunities as well as the labour force participation decisions of young people in order to obtain a more precise picture of the extent to which youths are affected disproportionately by cyclical fluctuations of the economy and the extent to which their unemployment is disguised in school or non-school activity. It is also important to know what affects young people's participation in the labour force in order to see if participation increases may offset, in part at least, future declines in the youth population. Projections are also needed of the industrial and occupational demands that most affect youths, especially as those demands can be expected to change in response to environmental policies, tariff reductions, energy policies, and perhaps a slowdown in the growth of the public sector.

Additional knowledge is needed about skill shortages - whether they are true shortages, especially in the long run, and if so how they may be met. It is also important to know the permanent effect on young people of periods of unemployment as they first enter the labour market. More information is also needed on the personal characteristics of unemployed young people, especially so that they can be compared with other groups that might be considered to be disadvantaged in the labour market and whose employment position may in fact be worsened by special programs intended only for young people.

With respect to specific programs, the questions are numerous. What are the barriers, if any, that discourage individual trainees from bearing the cost of widely usable training? In so far as income maintenance programs reduce work incentives for the young, what do they do with their increased 'leisure' - is it used to enhance their future employment prospects, or is it pure leisure? To what extent do the demand-side programs, such as wage subsidies, employment tax credits, and job creation

in the public sector, simply displace other workers? What are the adverse effects on employment, if any, of the various forms of wage fixing, especially minimum wages, and how might these be mitigated by a lower minimum wage for the young? The question becomes: which questions are most in need of answers, and which could be answered, in part at least, from the available evidence and from the general background discussed previously?

The overriding issue in need of research and discussion is the proper role of governments in dealing with youth unemployment in particular and labour markets in general. Where precisely does the market fail, if it does? And if it fails what is the proper role of governments? Throughout the vast literature on youth unemployment there is surprisingly little discussion of how markets operate or fail to operate in this particular area. Without such knowledge, however, public policies may be wasteful, ineffective, or harmful to the young or other groups. It is clear that youth unemployment must be viewed in the context of unemployment in general, and that government policies for dealing with youth unemployment must be viewed in the context of the role of governments in labour markets.



## APPENDIX A

## YOUTH LABOUR FORCE PARTICIPATION RATES, CANADA 1953-79

Year	Males		Females	
	15-19	20-24	15-19	20-24
1953	62.7	93.6	44.5	48.7
54	60.7	92.2	45.3	48.2
55	58.6	92.4	44.2	47.8
56	58.2	92.1	45.5	48.6
57	57.8	91.5	44.4	48.1
58	54.9	90.9	43.2	49.0
59	52.7	90.4	43.2	48.1
1960	51.7	90.4	43.9	49.6
61	48.5	89.8	43.5	50.4
62	47.5	88.4	41.6	51.4
63	47.0	88.5	40.1	52.0
64	45.8	88.3	39.9	52.8
65	46.0	88.1	40.0	54.4
66	46.0	88.0	41.1	57.6
67	46.4	86.5	41.4	58.5
68	45.8	84.5	40.8	60.4
69	44.6	84.4	40.6	61.4
1970	45.2	83.0	39.6	60.6
71	45.5	83.0	40.5	62.1
72	48.0	83.7	42.0	62.8
73	51.5	85.0	44.8	64.8
74	54.6	86.0	47.6	65.3
75	54.7	85.0	47.4	66.9
76	52.7	85.1	47.0	67.3
77	54.0	85.1	46.6	68.8
78	54.8	85.8	48.0	70.3
79	57.2	86.4	50.8	71.3

SOURCE: 1953-77 figures are from Denton, Robb, and Spencer (1980, Table 3); figures for 1978 are from Statistics Canada (1979b, 46); and figures for 1979 are from Statistics Canada (1979a, 83).

## APPENDIX B

## FEDERAL AND PROVINCIALY SPONSORED PROGRAMS FOR YOUTH EMPLOYMENT, ONTARIO 1979

Program	Number of positions	Time frame/ deadline	Qualifications	Rate of pay	Sponsor
Agricrew - Teams of students providing agricultural labour for local farmers	320 - Ontario	July and Aug./ 16 April 1979	Secondary school students with an interest in farming and with some agricultural skills	Provincial minimum wage	Experience '79 - Ontario Ministry of Agriculture and Food
Assisting Community Agencies - Non-profit community agencies offer increased employment opportunities to young people	1,750-2,000 - Ontario	May-Aug. Varies with each agency	Young people who are residents of Ontario	Provincial minimum wage	Experience '79 Ontario Ministry of Culture and Recreation
Canada World Youth - 8-month exchange program with developing nations	110 - Ontario	Program A starts July. Program B starts Sept./ Program A 15 March 1979; Program B 1 April 1979	Canadian citizens or permanent residents; participants - 17-20 years; field staff - over 21 years	Participants - food, lodging & transportation; group leaders - \$800/month; co-ordinators - \$1,000/month plus travel	Canadian International Development Agency
Canadian University Service Overseas (CUSO) - Overseas postings to assist in the development of Third World Countries	300 - Canada	Year-round program	Demonstrated skill in a particular field, academic degree, or trade papers. Selection based on personal interview.	Travel and living expenses plus salary; varies with country of posting.	Canadian International Development Agency
Career Oriented Summer	Varies	May-Sept.	Varies with positions. Full-	Varies with	Public Service

Program	Number of positions	Time frame/ deadline	Qualifications	Rate of pay	Sponsor
Employment Program - Assignments with federal departments and agencies provide students with the opportunity to look at career possibilities which may be available after graduation.		Recruiting takes place	time students at universities, colleges, CEGEPs, or technical institutes who will continue studies in 1979-80.	position	Commission of Canada
Co-operative Education Program - Alternates practical work with study.	Not applicable	Year-round program	Students enrolled in Co-operative Education/Co-operative Work programs in secondary and post-secondary schools	Not applicable	Canada Employment and Immigration Commission
Employment Tax Credit Program - Tax incentive to assist employers to create new jobs for unemployed Canadians	Target - 18,600 new jobs - Ontario	Year-round program	Not specifically for youth. Must be unemployed and registered with a Canada Employment Centre or Canada Farm Labour Pool.	No less than provincial minimum wage. Employer sets rate.	Canada Employment and Immigration Commission
Experience '79 - Experience-based employment program with 111 components offering jobs in the broad areas of culture, recreation, social services, education and environment.	13,500 - Ontario	May-Sept./ Post-secondary employment - 1 April 1979. All others - 16 April 1979	Program designed for young people 15-24 years. Qualifications vary depending on the position and the component program.	Provincial minimum wage	Ontario Youth Secretariat
International Youth Exchange Programs - Exchanges offering young Canadians the opportunity to gain work experience in another country.	2,400 Canadians in 1978	Some are summer exchanges and others last for up to a year.	Canadian citizens between the ages of 18 and 30 years, in good health, and who meet specific requirements for each	Varies according to the job and country involved.	Canada Employment and Immigration Commission in co-operation with student

Involvement in Municipal Administration - Experience provided working in local government in areas of community planning and administration.	1,263 in 1978 in Ontario; similar number in 1979.	Summer	Post-secondary school students enrolled in urban or regional planning, public or business administration, urban geography, political science, economics, or commerce.	Varies. Municipalities and planning boards receive \$125 a wk. per youth hired.	Ontario Ministry of Intergovernmental Affairs	and cultural organizations.
Job Exploration by Students - Gives potential secondary school leavers a nine-week job experience to help them decide whether to return to school or remain in the labour force.	1,263 in 1978 in Ontario	Up to 9 weeks 18 June 31 August	Students 15-19 years are identified by secondary school guidance counsellors.	No less than provincial minimum wage	Canada Employment and Immigration Commission	
Job Experience Training Program (JET) - Recent school leavers are placed in jobs for up to 26 weeks to gain work experience leading to permanent jobs.	Over 11,000 in Ontario in 1978-9	Up to 26 weeks	Young people 16-24 yrs. unable to find or retain employment due to lack of experience or skills. Out of school 3-36 months. Registered at Canada Employment Centre or Youth Employment Centre	No less than provincial minimum wage. Employers sets the rate.	Canada Employment and Immigration Commission	
Junior Agriculturalist Farm Program - Students from urban centres gain practical farm experience and insight into rural life.	280 - Ontario	9 weeks July-August/ 16 April 1979	Students 16 and 17 yrs. with no previous farming background	Provincial minimum wage	Experience '79 - Ontario Ministry of Agriculture and Food	
Junior Conservationist Award Program - Projects are designed to develop young people's appreciation of the concepts of resource management.	35 - Ontario	7 weeks July-August/ 1 April 1979	Youth 16-18 years with active membership in a conservation agency. Participants are sponsored by the agency.	\$10 a day plus room and board for 6-day week.	Ontario Ministry of Natural Resources	

Program	Number of positions	Time frame/ deadline	Qualifications	Rate of pay	Sponsor
Junior Forest Ranger - Youth learn about natural resources by working in special outdoor work camps.	1,968 - Ontario	July-August/ Applications received from Sept.-1 Feb.	Students 17 years and not yet 18 yrs. by 31 August and resident of Ontario enrolled in secondary school	\$10 a day plus room and board for 6-day week	Ontario Ministry of Natural Resources
Katimavik - Action-learning program encouraging personal development and serving Canadian communities	1,180 - Canada	10-month terms/ Varies between 23 April and 11 July 1979	Youth 17-21 years in good physical and mental health.	\$1 a day plus room and board and transportation and \$1,000 at the end of the program	Department of National Defence funds non-profit organization.
Legal Aid Clinics - Program provides law students with the chance to work in Legal Aid Clinics.	159 - Ontario	May-August/ 1 April 1979	Students who have completed at least one year of law and who have experience as volunteers in student legal aid clinics at their university.	Provincial minimum wage	Experience '79 - Ontario Ministry of the Attorney General
Native Students - Program provides opportunities for native students to work in academic and administrative departments at Ontario post-secondary institutions.	160 - Ontario	July-August/ 16 April 1979	Native secondary school students	Provincial minimum wage	Experience '79 - Ontario Ministry of Education
Native Youth Internship Program - Native/Metis youth are hired to work in various offices within the Commission.	42 in 1978 in Ontario	Summer/Varies with each area.	Native/Metis youth between 16 and 25 years.	Varies with different positions.	Canada Employment and Immigration Commission
Open House Canada - Reciprocal culture exchange	20,000 participants -	Year-round exchange. Minimum	Groups of Canadian citizens or permanent residents 14	Not applicable. Travel costs are	Secretary of State



changes between groups of young people from all of Canada	Canada	5-day visits	to 22 years	paid.
Ontario Career Action Program (OCAP) - Program places young people in employment for up to 16 weeks giving them a chance to gain work experience and develop job skills.	5,750 in 1978 - Ontario	16 Weeks/Year - round program	Youth 16-24 yrs. who are out of the educational system and have been unemployed for a minimum of six weeks	\$100 a week stipend  Ontario Ministry of Education
Ontario Youth Employment Program (OYEP) - Subsidies are provided to private sector employers who hire young people for newly created jobs.	Over 40,000 jobs created in 1978.	30 April - 21 October 1979	Youth 15-24 years, residing and eligible to work in Ontario	Not less than provincial minimum wage. Employer sets the rate.  Ontario Ministry of Intergovernmental Affairs and Ontario Youth Secretariat
Quebec-Ontario Summer Student Exchange - Program offers an employment exchange in the Ontario and Quebec governments for students from both provinces.	200 - Ontario	Summer/1 April 1979	University students 18 years and over	Provincial minimum wage  Ontario Civil Service Commission
Regular Summer Replacement Hiring - Various ministries and agencies hire students to replace vacationing staff.	Approximately 8,500-Ontario	May-Sept. depending on the job. Application should be submitted in early fall.	Students. Qualifications vary with different jobs.	Varies with the job.  Ontario provincial ministries in conjunction with Ontario Civil Service Commission
Scientific and Technical Employment Program-Designed to stimulate creation of permanent research and development jobs in the private sector	475 - Canada	Year-round	Science graduates with a degree from a recognized university and technicians with a minimum of a two-year diploma	Varies. Subsidies are provided to companies hiring the young graduates.  National Research Council of Canada

Program	Number of positions	Time frame/ deadline	Qualifications	Rate of pay	Sponsor
Small Business Intern Program - Businesses receive funds to hire recent graduates who wish to acquire experience in a small business.	450 - Ontario	Year-round	Youth must have completed a recognized program of study lasting at least two years beyond secondary school.	Varies. Subsidies are provided to employers.	Department of Industry, Trade and Commerce
Students in Personnel - Places students in personnel offices of government and private industry.	80 - Ontario	May-August/ 1 April 1979	Senior university and community college students, preferably in Business Administration and Social Sciences with interest in the personnel field	Provincial minimum wage	Experience '79 Ontario Ministry of Labour, Ontario Civil Service Commission
Students Training in Industrial Relations - Students hired by the ministry and placed with sponsoring organizations, companies, unions, law firms, and consulting firms to gain exposure to industrial relations	55 - Ontario	14 May-31 Aug./ 16 Jan. 1979	Senior university students with experience in industrial relations and an academic background in law, business administration, commerce, or finance.	\$170 per week	Experience '79 Ontario Ministry of Labour
Summer Youth Employment Program - 10 federal departments offer 23 component programs designed to provide jobs which are socially useful and personally beneficial for participants.	64,000 - Canada	April-Sept. Varies with each component	Positions are open to post-secondary and secondary school students, as well as youth who have left school. Qualifications vary with components.	No less than provincial minimum wage Varies with each position.	Canada Employment and Immigration Commission in conjunction with 9 other federal departments
Student Venture Capital Program - Students receive	160 - Ontario	May-August Loans must be	Senior secondary or post-secondary students 18 years	Remuneration based on the	Experience '79- Ontario Ministry

interest-free loans to a maximum of \$1,000 per venture to own and operate their own summer businesses.	repaid by 31 Oct./Experience '79 deadline.	or over	success of each venture	of Education
Young Canada Works - Organizations sponsor employment-generating projects in response to community need and to provide experience and training for the young people involved.	35,000 - Canada April 30 Sept. 8 1979. Varies in each community.	Each project funded has its own criteria but preference is given to students.	Project managers \$156/wk.; project employees provincial minimum wage	Canada Em-ployment and Immigration Com-mission
Youth Job Corps - Projects are developed by federal departments and agencies to provide young people with em-ployment as well as training and experience.	8,000 students 16,500 non-students - Canada	Students - 1 April- '31 Aug. 1979 Non-students- 1 April 1979- 31 March 1980	Project leader - up to \$228/wk.; Assistant up to \$156/wk.; Em-ployees - provincial minimum wage	Canada Em-ployment and Immigration Com-mission
Youth Care for Senior Citizens - Young people are employed in institutions caring for the elderly and the handicapped.	1978-79 505 - Ontario	Young people between 18 and 25 years	Varies depending on position and institution.	Ontario Ministry Community and Social Services

SOURCE: Ontario Youth Secretariat [1979]

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